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EXAMINER

FISH, JAMIESON W

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 03/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/820,582

Applicant(s)

GOLDMAN ET AL.

Examiner

Jamieson W. Fish

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
2. The following title is suggested: Regulating the Quality of a Broadcast by Monitoring User Behavior Information.

Claim Objections

3. Claim **10**, is objected to because of the following informalities: "the signal source" on line 2 should be changed to "a signal source."
4. Claims **18** and **27** are objected to because of the following informalities: Claim 18, "system tuned" on line 8 should read, "system is tuned" and line 12 should read, "systems are tuned." Claim **27** requires the same corrections on lines 10 and 15, respectively. Appropriate correction is required.
5. Claim **31** is objected to because of the following informalities: line 7 "ore" should be replaced with "more," line 8 "format" should be replaces with "from at" Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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7. Claims **18-35** are rejected under 35 U.S.C. 102(b) as being anticipated by Rudrapatna (5,592,470).

8. Regarding claim **18**, Rudrapatna teaches in a system where a broadcast is provided across a medium having a fixed bandwidth and is received by one or more individual home entertainment systems (See Col. 3 lines 7-13 and Col. 4 lines 25-27, 52-55), a method for restructuring the broadcast based on feedback transmitted from the one or more home entertainment systems across one or more potentially unreliable back channels to a clearinghouse system (See Fig. 2 Fig. 4, Col. 4 lines 30-52, and Col. 5 lines 1-67 Traffic patterns established via upstream channels before or during broadcast Network Servers 213-222 are a clearinghouse system), the method comprising the acts of: receiving at the clearinghouse system user behavior information across a first communication link from a first home entertainment system, wherein the user behavior information indicates that the first home entertainment system is tuned to a channel broadcast across the medium (See Col. 4 lines 25-50, Col. 5 lines 3-25 Indicating a receiver is tuned to a particular channel is inherent to monitoring traffic patterns); receiving at the clearinghouse system other user behavior information across other communication links from other home entertainment systems, wherein the other user behavior information indicates that the other home entertainment systems are tuned to the channel broadcast across the medium (See Col. 4 lines 25-50, Col. 5 lines 3-25 Monitoring traffic patterns); combining at the clearinghouse system the user behavior information from the first home entertainment system with the other user behavior information from the other home entertainment systems (See Col. 4 lines 25-

50, Col. 5 lines 3-25 Monitoring traffic patterns); and automatically restructuring a broadcast of the channel based on the combined user behavior information (See Fig. 5 and Col. 5 lines 27-67, Col. 6 lines 1-30 The process flow is automatic to traffic variations).

9. Regarding claim **19**, Rudrapatna teaches wherein the first communication link and the other communication links are each back channels (See Fig. 4, Col. 4 lines 30-52, and Col. 5 lines 1-67 Traffic patterns established via upstream channels before or during broadcast).

10. Regarding claim **20**, Rudrapatna further teaches comprising the act of statistically determining at the clearinghouse system the reliability of the combined user behavior information, wherein said act of automatically restructuring a broadcast is based on the statistical determination performed at the clearinghouse system (See Fig. 2 Channel Allocation Server, Fig. 5 Traffic variations, Fig. 6 block 605 and Col. 5 lines 29-67 Col. 6 lines 4-30 Channel Allocation Server which is part of the clearinghouse system determines if there is a large enough change in traffic patterns to change channel allocation. From the Applicant's specification reliability is interpreted to relate to the amount of user behavior received Page 20 lines 3-6, 16-19).

11. Regarding claim **21**, Rudrapatna teaches wherein the statistical determination performed at the clearinghouse system comprises determining when a statistically significant amount of user behavior information has been received to cause the broadcast to be automatically restructured (See Fig. 2 Channel Allocation Server, Fig. 5 Traffic variations, Fig. 6 block 605 and Col. 5 lines 29-67 Col. 6 lines 4-30 Channel

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Allocation Server which is part of the clearinghouse system determines if there is a large enough change in traffic patterns to change channel allocation).

12. Regarding claim **22**, The USPTO considers the applicant's "at least one of" language to be anticipated by any reference containing any of the subsequent corresponding elements. Rudrapatna teaches wherein said act of automatically restructuring a broadcast comprises at least one of: modifying bandwidth of the broadcast (See Fig. 5 and Col. 6 1-30); changing modulation of the broadcast; changing an encoding scheme of the broadcast; varying parameters of the encoding scheme of the broadcast; interrupting the broadcast by allocating no bandwidth to the channel so as to entirely shut off the channel; redistributing the channel from a first transponder of a satellite television system to a second transponder of the satellite television system; and reserving a guaranteed amount of bandwidth for the broadcast (See Col. 5 lines 1-25).

13. Regarding claim **23**, Rudrapatna teaches wherein said act of automatically restructuring a broadcast comprises allocating varying amounts of bandwidth of an MPEG data stream to the channel (See Col. 7 lines 63-67, Col. 8 lines 1-42).

14. Regarding claim **24**, Rudrapatna teaches in a system where a broadcast is provided from a signal source across a medium having a fixed bandwidth and is received by one or more individual home entertainment systems (See Col. 3 lines 7-13 and Col. 4 lines 25-27, 52-55), a method for optimizing the bandwidth by restructuring the broadcasting of one or more channels within the broadcast based on feedback transmitted from the one or more home entertainment systems to the signal source across one or more back channels (See Fig. 4, Col. 4 lines 30-52, and Col. 5 lines 1-67

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Traffic patterns established via upstream channels before or during broadcast), the method comprising the acts of: transmitting a broadcast from a signal source to one or more home entertainment systems (See Fig. 1 and Col. 1 lines 8-15, Col. 2 lines 58-67, Col. 3 1-24); receiving at the signal source user behavior information across a first back channel from a first home entertainment system, wherein the user behavior information indicates that the first home entertainment system tuned to a channel of the broadcast, and wherein the first home entertainment system is one of the one or more home entertainment systems (See Fig. 4 Traffic Patterns, Fig. 5 Traffic Variations Col. 4 lines 25-50, Col. 5 lines 3-25 Indicating a receiver is tuned to a particular channel is inherent to monitoring traffic patterns); receiving at the signal source other user behavior information across other back channels from other home entertainment systems, wherein the other user behavior information indicates that the other home entertainment systems tuned to the channel of the video service, and wherein the other home entertainment systems are of the one or more home entertainment systems (See Fig. 4 Traffic Patterns, Fig. 5 Traffic Variations, Col. 4 lines 25-50, Col. 5 lines 3-25 Indicating other receivers are tuned to a particular channel is inherent to monitoring traffic patterns); combining the user behavior information from the first home entertainment system with the other user behavior information from the other home entertainment systems (See Fig. 4 Traffic Patterns, Fig. 5 Traffic Variations Col. 4 lines 25-50, Col. 5 lines 3-25 Combining user behavior information from a first receiver with other receivers is inherent to monitoring traffic patterns); and automatically restructuring a broadcast of

the channel based on the combined user behavior information (See Fig. 5 and Col. 5 27-67, Col. 6 1-30 The process flow is automatic to traffic variations).

15. Regarding claim **25**, Rudrapatna teaches wherein the user behavior information is received in real time across the first communication link with respect to a program broadcast on the channel (See Fig. 4, Col. 4 lines 30-52, and Col. 5 lines 1-67 Traffic patterns are established via upstream channels before or during broadcast).

16. Regarding claim **26**, Rudrapatna teaches wherein the user behavior information is received on a deferred basis across the first communication link with respect to a program broadcast on the channel (See Fig. 4 Non real-time process, Col. 4 lines 30-52, and Col. 5 lines 1-67 Traffic patterns are established via upstream channels before or during broadcast).

17. Regarding claims **27-28**, claims 27-28 relate to a computer program product comprising a computer readable medium carrying computer program code means utilized to implementing the methods of claims **18-19**, respectively. Rudrapatna teaches implementing his method his wireless broadband communication network comprising a plurality of servers that implement his method (See Fig. 1, Fig. 2 and Abstract, Col. 2 lines 58-67, Col. 3 lines 1-67). A computer program product is inherent to a server, therefore claims **27-28** are evaluated and rejected with respect to claims 18-19.

18. Regarding claim **29**, Rudrapatna teaches in a system where a broadcast is provided from a signal source across a medium having a fixed bandwidth and is received by one or more individual home entertainment systems (See Col. 3 lines 7-13 and Col. 4 lines 25-27, 52-55), a method for optimizing the bandwidth by restructuring

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the broadcasting of one or more channels within the broadcast based on feedback transmitted from the one or more home entertainment systems to the signal source across one or more back channels (See Fig. 4, Col. 4 lines 30-52, and Col. 5 lines 1-67 Traffic patterns established via upstream channels before or during broadcast), the method comprising the acts of: transmitting a broadcast from a signal source to one or more home entertainment systems (See Fig. 1 and Col. 1 lines 8-15, Col. 2 lines 58-67, Col. 3 1-24); receiving at the signal source user behavior information across a first back channel from a first home entertainment system, wherein the user behavior information indicates that the first home entertainment system tuned to a channel of the broadcast, and wherein the first home entertainment system is one of the one or more home entertainment systems (See Fig. 4 Traffic Patterns, Fig. 5 Traffic Variations Col. 4 lines 25-50, Col. 5 lines 3-25 Indicating a receiver is tuned to a particular channel is inherent to monitoring traffic patterns); receiving at the signal source other user behavior information across other back channels from other home entertainment systems, wherein the other user behavior information indicates that the other home entertainment systems tuned to the channel of the video service, and wherein the other home entertainment systems are of the one or more home entertainment systems (See Fig. 4 Traffic Patterns, Fig. 5 Traffic Variations, Col. 4 lines 25-50, Col. 5 lines 3-25 Indicating other receivers are tuned to a particular channel is inherent to monitoring traffic patterns); combining the user behavior information from the first home entertainment system with the other user behavior information from the other home entertainment systems (See Fig. 4 Traffic Patterns, Fig. 5 Traffic Variations Col. 4 lines 25-50, Col. 5

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lines 3-25 Combining user behavior information from a first receiver with other receivers is inherent to monitoring traffic patterns); and automatically restructuring a broadcast of the channel based on the combined user behavior information (See Fig. 5 and Col. 5 27-67, Col. 6 1-30 The process flow is automatic to traffic variations); wherein the first communication link and the other communication links are each back channels (See Fig. 4, Col. 4 lines 30-52, and Col. 5 lines 1-67 Traffic patterns established via upstream channels before or during broadcast); wherein the user behavior information is received in real time across the first communication link with respect to a program broadcast on the channel (See Fig. 4, Col. 4 lines 30-52, and Col. 5 lines 1-67 Traffic patterns are established via upstream channels before broadcast). Rudrapatna teaches implementing his method his wireless broadband communication network comprising a plurality of servers that implement his method (See Fig. 1, Fig. 2 and Abstract, Col. 2 lines 58-67, Col. 3 lines 1-67). A computer program product is inherent to a server. Therefore, Rudrapatna anticipates the computer program product of claim 29.

19. Regarding claim 30, Rudrapatna teaches in a system where a broadcast is provided from a signal source across a medium having a fixed bandwidth and is received by one or more individual home entertainment systems (See Col. 3 lines 7-13 and Col. 4 lines 25-27, 52-55), a method for optimizing the bandwidth by restructuring the broadcasting of one or more channels within the broadcast based on feedback transmitted from the one or more home entertainment systems to the signal source across one or more back channels (See Fig. 4, Col. 4 lines 30-52, and Col. 5 lines 1-67 Traffic patterns established via upstream channels before or during broadcast), the

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method comprising the acts of: transmitting a broadcast from a signal source to one or more home entertainment systems (See Fig. 1 and Col. 1 lines 8-15, Col. 2 lines 58-67, Col. 3 1-24); receiving at the signal source user behavior information across a first back channel from a first home entertainment system, wherein the user behavior information indicates that the first home entertainment system tuned to a channel of the broadcast, and wherein the first home entertainment system is one of the one or more home entertainment systems (See Fig. 4 Traffic Patterns, Fig. 5 Traffic Variations Col. 4 lines 25-50, Col. 5 lines 3-25 Indicating a receiver is tuned to a particular channel is inherent to monitoring traffic patterns); receiving at the signal source other user behavior information across other back channels from other home entertainment systems, wherein the other user behavior information indicates that the other home entertainment systems tuned to the channel of the video service, and wherein the other home entertainment systems are of the one or more home entertainment systems (See Fig. 4 Traffic Patterns, Fig. 5 Traffic Variations, Col. 4 lines 25-50, Col. 5 lines 3-25 Indicating other receivers are tuned to a particular channel is inherent to monitoring traffic patterns); combining the user behavior information from the first home entertainment system with the other user behavior information from the other home entertainment systems (See Fig. 4 Traffic Patterns, Fig. 5 Traffic Variations Col. 4 lines 25-50, Col. 5 lines 3-25 Combining user behavior information from a first receiver with other receivers is inherent to monitoring traffic patterns); and automatically restructuring a broadcast of the channel based on the combined user behavior information (See Fig. 5 and Col. 5 27-67, Col. 6 1-30 The process flow is automatic to traffic variations); wherein the first

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communication link and the other communication links are each back channels (See Fig. 4, Col. 4 lines 30-52, and Col. 5 lines 1-67 Traffic patterns established via upstream channels before or during broadcast); wherein the user behavior information is received on a deferred basis across the first communication link with respect to a program broadcast on the channel (See Fig. 5 Traffic Variations, Col. 4 lines 30-52, and Col. 5 lines 29-67 Traffic variations established via upstream channel cause channel allocation to be varied in real-time). Rudrapatna teaches implementing his method his wireless broadband communication network comprising a plurality of servers that implement his method (See Fig. 1, Fig. 2 and Abstract, Col. 2 lines 58-67, Col. 3 lines 1-67). A computer program product is inherent to a server. Therefore, Rudrapatna anticipates the computer program product of claim 30.

20. Regarding claim 31, Rudrapatna teaches in a system that provides a broadcast across a medium having a fixed bandwidth to individual home entertainment system (See Col. 3 lines 7-13 and Col. 4 lines 25-27, 52-55), a method for improving the broadcast based at least in part by feedback received from one or more of the home entertainment systems, the method comprising the acts of: receiving a broadcast at a local signal source, wherein the broadcast is sent from a central signal source (See Fig. 2 National Head End 201, Local Head End 211 and Col. 3 lines 53-67, Col. 4 lines 1-22 National Head End is central signal source. Local Head End is local signal source); transmitting the broadcast to one or more home entertainment systems (See Fig. 2 and Col. 1 lines 8-16 and Col. 3 lines 1-24 Point-to-multipoint to set-top boxes); receiving at the local signal source user behavior information from at least one of the one or more

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home entertainment systems, wherein the user behavior information is received across a back channel (See Fig. 2 Col. 4, lines 31-67 Users send requests for services across back channel to servers which are part of the local signal source. A request is user behavior information); and transmitting a dynamically restructured broadcast to the one or more home entertainment systems, wherein the restructured broadcast is based at least in part by the user behavior information received (See Col. 5 lines 1-25 Traffic patterns (user behavior information received) determine bandwidth allocation.

21. Regarding claim **32**, Rudrapatna teaches wherein the broadcast is dynamically restructured at the local signal source (See Fig. 5 Traffic Variations and Col. 5 lines 28-67 Traffic Variations cause bandwidth allocation to change in real time).

22. Regarding claim **33**, The USPTO considers the applicant's "at least one of" language to be anticipated by any reference containing any of the subsequent corresponding elements. Rudrapatna teaches wherein the dynamic restructuring of the broadcast comprises at least one of: modifying bandwidth of the broadcast (See Fig. 5 and Col. 6 1-30); changing modulation of the broadcast; changing an encoding scheme of the broadcast; varying parameters of the encoding scheme of the broadcast; redistributing a channel from a first transponder of a satellite television system to a second transponder of the satellite television system; and reserving a guaranteed amount of bandwidth for the broadcast (See Col. 5 lines 1-25).

23. Regarding claim **34**, Rudrapatna further teaches the acts of: transmitting the user behavior information to one of the central signal source and a clearinghouse system (See Col. 4 lines 25-52); wherein said act of transmitting the user behavior information

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is performed before said act of transmitting a dynamically restructured broadcast (See Col. 5 lines 1-25 Established traffic patterns (user behavior information) are used to restructure broadcast and are thus transmitted before dynamically restructured broadcast); and receiving the dynamically restructured broadcast (See Abstract Receiving the dynamically restructured broadcast is inherent to delivery of restructured broadcast).

24. Regarding claim 35, The USPTO considers the applicant's "at least one of" language to be anticipated by any reference containing any of the subsequent corresponding elements. Rudrapatna teaches wherein the broadcast was dynamically restructured by at least one of: a modification in bandwidth allocation (See Fig. 5 and Col. 6 1-30); a change in the modulation of the broadcast; a change in an encoding scheme of the broadcast; a modification in a parameter of the encoding scheme of the broadcast; a redistribution of a channel from a first transponder of a satellite television system to a second transponder of the satellite television system; and a reservation of a guaranteed amount of bandwidth for the broadcast (See Col. 5 lines 1-25).

25.

Claim Rejections - 35 USC § 103

26. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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27. Claims **1-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rudrapatna in view of Blasko (US 2001/0049620).

28. Regarding claim **1**, Rudrapatna teaches in a system where a broadcast is provided across a medium having a fixed bandwidth to individual home entertainment systems (See Col. 3 lines 7-13 and Col. 4 lines 25-27, 52-55), a method for optimizing the use of the available bandwidth by dynamically restructuring the broadcasting of channels of the medium based on feedback from at least some of the home entertainment systems (See Abstract), the method comprising the steps for: generating user behavior information that indicates that the first home entertainment system is tuned to a channel broadcast across the medium (See Col. 4 lines 25-50, Col. 5 lines 3-25 Indicating a receiver is tuned to a particular channel is inherent to monitoring traffic patterns); combining the user behavior information from the first home entertainment system with user behavior information from other home entertainment systems that corresponds to the channel (See Col. 5 lines 3-25 Combining multiple user behavior is inherent to monitoring traffic patterns); and dynamically restructuring a broadcast of the channel based on the combined user behavior information so as to optimize the use of the available bandwidth (See Fig. 5 Traffic Variations and Col. 5 lines 27-67, Col. 6 lines 1-30). Rudrapatna differs from the claimed system in that user behavior is not necessarily generated at each individual home entertainment system. However, generating user behavior at a home entertainment system and sending this information to a central source for evaluation is well known in the art as taught by Blasko (See Fig. 1, Fig. 9 925 Steps 103, 107 and Paragraphs 16, 17, 18, 22, 44, 157, and 158).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rudrapatna so that the user behavior information was generated locally and transmitted to a central source to provide a novel profiling scheme for television environments which protected the privacy of the consumer (See Paragraph 15).

29. Regarding claim 2, Rudrapatna modified with Blasko teaches wherein the combined user behavior information is anonymous such that the identities of the first home entertainment system and the other home entertainment systems are not disclosed (See Blasko Paragraphs 18-20).

30. Regarding claim 3, Rudrapatna modified with Blasko teaches wherein said step for dynamically restructuring a broadcast is performed automatically (See Rudrapatna Fig. 5 and Col. 5 lines 27-67, Col. 6 lines 1-30 The process flow is automatic to traffic variations).

31. Regarding claim 4, The USPTO considers the applicant's "at least one of" language to be anticipated by any reference containing any of the subsequent corresponding elements. Rudrapatna modified with Blasko teaches wherein said step for dynamically restructuring comprises at least one of: modifying bandwidth of the broadcast (See Rudrapatna Fig. 5 and Col. 6 1-30); changing modulation of the broadcast; changing an encoding scheme of the broadcast; varying parameters of the encoding scheme of the broadcast; interrupting the broadcast by allocating no bandwidth to the channel so as to entirely shut off the channel; redistributing the channel from a first transponder of a satellite television system to a second transponder

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of the satellite television system; and reserving a guaranteed amount of bandwidth for the broadcast (See Rudrapatna Col. 5 lines 1-25).

32. Regarding claim 5, Rudrapatna modified with Blasko further teaches the step for transmitting the user behavior information as feedback across a back channel from the first home entertainment system to a signal source, wherein the user behavior information is transmitted in one of real time and a deferred basis with respect to the broadcast of the channel (See Rudrapatna Fig. 4, Col. 4 lines 30-52, and Col. 5 lines 1-67 Traffic patterns established via upstream channels before or during broadcast).

33. Regarding claim 6, Rudrapatna modified with Blasko teaches wherein a statistical analysis is performed at the signal source to determine when a statistically significant number of home entertainment systems have transmitted user behavior information (See Fig. 2 Channel Allocation Server, Fig. 5 Traffic variations, Fig. 6 block 605 and Col. 3 lines 29-34, Col. 5 lines 29-67 Col. 6 lines 4-30 Channel Allocation Server which is part of the signal source determines if there is a large enough change in traffic patterns to change channel allocation).

34. Regarding claim 7, Rudrapatna modified with Blasko further teaches the step for transmitting the user behavior information as feedback across a back channel from the first home entertainment system to a clearinghouse system, wherein the user information is transmitted in at least one of (i) real time with respect to the broadcast of the channel and (ii) on a deferred basis with respect to the broadcast of the channel (See Blasko Fig. 9 Paragraph 157 and 158 Secure profiling server is clearinghouse. See Rudrapatna Fig. 2 Network Servers 213-222, Fig. 4, Col. 4 lines 30-52, and Col. 5

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lines 1-67 Traffic patterns established via upstream channels before or during broadcast).

35. Regarding claim 8, Rudrapatna modified with Blasko teaches wherein the clearinghouse system performs said step for combining (See Blasko Fig. 9 Paragraph 157 and 158).

36. Regarding claim 9, Rudrapatna modified with Blasko teaches wherein a statistical analysis is performed at the clearinghouse system to determine when a statistically significant number of home entertainment systems have transmitted user behavior information (See Rudrapatna Fig. 5 Traffic variations, Fig. 6 block 605 and Col. 5 lines 29-67 Col. 6 lines 4-30 Channel Allocation Server determines if there is a large enough change in traffic patterns to change channel allocation).

37. Regarding claim 10, Rudrapatna modified with Blasko teaches wherein the clearinghouse system processes the combined user behavior information and forwards the results to a signal source (See Blasko Paragraph 159-161 The result of the combined user information system is programming with targeted advertisements).

38. Regarding claim 11, Rudrapatna modified with Blasko teaches wherein the processing performed at the clearinghouse system comprises associating the combined user behavior information with data from a data source (See Rudrapatna Col. 5 lines 1-25 "The traffic demands are categorized as to specific services..." Specific services are data from a data source).

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39. Regarding claim **12**, Rudrapatna modified with Blasko teaches wherein the data source comprises an electronic programming guide that provides data as to at least one of a program and an advertisement. (See Blasko Paragraph 45).

40. Regarding claim **13**, Rudrapatna modified with Blasko teaches wherein the processing performed at the clearinghouse system comprises generating a profile of at least one of the home entertainment systems and the users (See Blasko Paragraph 157-158).

41. Regarding claim **14**, Rudrapatna modified with Blasko teaches wherein the profile includes the programs of the broadcast to which the home entertainment systems are more frequently tuned compared to other programs of the broadcast (See Rudrapatna Col. 3 lines 49-52, Col. 4 lines 31-44, Col. 5 lines 1-25 Frequency of tuning to specific channels is inherent to a traffic pattern)

42. Regarding claim **15**, Rudrapatna modified with Blasko further teaches allocating increased bandwidth to the programs more frequently tuned (See Rudrapatna Col. 5 lines 1-25, Col. 6 lines 40-46 Larger amount of bandwidth is allocated for services with larger traffic demands).

43. Regarding claim **16**, Rudrapatna modified with Blasko teaches wherein the bandwidth is increased at an instant in time prior to the airing of the programs more frequently tuned (See Rudrapatna Fig. 4 Non Real-Time process, Col. 5 lines 1-25 Allocating bandwidth before a broadcast is inherent to assignment of bandwidth based on established traffic patterns).

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44. Regarding claim 17, Rudrapatna modified with Blasko further teaches allocating increased bandwidth to channels of the broadcast to which the home entertainment systems are more frequently tuned (See Col. 5 lines 1-25, Col. 6 lines 40-46 Larger amount of bandwidth is allocated for services with larger traffic demands).

Conclusion

45. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamieson W. Fish whose telephone number is 571-272-7307. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

46. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Vu can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

47. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JF 2/8/2005


HATTRAN
PRIMARY EXAMINER